245 half acres of coffee or cocoa. This would yield no income for
434 the first four years and a maximum of £100 per year thereafter at current prices. This assumes an absence of land problems and crop disease. Even so, the prospect must be heavily dis-
[464] counted because of its uncertainty. Wage labour is now available
[465] to a limited extent at a rate of £150 per year in town areas and about £75 per year in rural areas.(1) At the time the coffee was planted, paid employment was scarcer and wages much lower.

411 Capital: Almost no capital is used in primary pro-
245 duction in Inonda. The few tools needed for small scale produc-
[654] tion are easily acquired from current income, the land is not an item involving monetary cost, coffee seeds are available from
[494] neighbouring gardens and cocoa pods are supplied by the Department of Agriculture at nominal cost. One man in a neighbouring village has a coffee huller in which the Inonda people have small shares, but as the Orokaiva Coffee Growers Society (to which the Inonda growers belong) provides for all other processing, there is no need for any other equipment in the villages. Although the introduction of capital may increase output, considerable increases in output are possible without it, and capital cannot be regarded as a serious limiting factor in Inonda cash cropping at this stage.

164 Health: During the period of the survey about 7% of
461 time was accounted for by sickness and caring for the sick, but details of sickness were not recorded for those who were in mourning in their houses. The total for the period is estimated at 10% of all time accounted for. From superficial enquiries malaria seems to be the main cause of illness but other common ailments seen during our stay were filariasis, gastro-enteritis and influenza. The suitability of the diet for sustained hard work is not known, though it was noticed that men seldom work two days in succession on heavy labour like bush clearing (though they performed regular heavy work for wages). On several occasions when the nights were particularly cold the people got up shortly after midnight and sat around fires for the rest of the night to

[466] [511] (1) Indentured labour is paid less, but relatively few Orokaiva are prepared to accept indenture. Direct comparison of gross incomes from cash cropping as against urban employment ignores the fact that food and housing costs are much higher in towns.

Cash crops

All four entrepreneurs were familiar with the very small scale cash-cropping which had been undertaken in their villages for many years, but because of the insignificant returns received from activity of this kind they wanted to avoid it. In discussions with the writer, they all referred frequently to their aim to plant on a large scale and to operate their plantations the way European planters did. The main differences were that the entrepreneurs were without capital and that they were prepared, at least until the enterprise was established, to undertake manual labour themselves.

The entrepreneurs A, B and C established their enterprises with the help of their wives and of certain close junior kinsmen. Each has occasionally hired labour, but none has been able to keep the workers for more than a few months (though one man worked for A for three years). The crops grown (coffee, cocoa and copra) are all labour intensive. Moreover, A and B had to clear heavy forest and C heavy undergrowth. A was helped by two younger brothers and in more recent years by two sons and a son-in-law. B has had the full-time labour throughout of his younger bachelor brother who lives as a member of B's household. C was able to enlist casual aid from his two younger brothers in the early establishment phase (and to a lesser extent from his father and his sister's son for food gardening). It is perhaps significant that none of them has called on more distant kinsmen, and none has called on unrelated people of the same village or neighbourhood. The reasons they gave, when questioned, were that the local people were lazy or resentful of their relative prosperity and, in the case of kinsmen, that they might expect disproportionate or inappropriate reciprocity.

B entered into an agreement with four men of two villages a few miles from his own whereby they all helped each other clear separate coffee plots in 1952. As B's was much larger than the others he agreed to provide a small manual coffee pulping machine which all four could use. There was some dissatisfaction by those with small plots with the proportionate benefits derived from the mutual help arrangement, and when B established his cocoa plot in 1959 only he and his brother worked on it.

What rights do the close kin acquire in the crops they have helped to establish? Orokaiva people frequently assist one another to clear land for gardens and this involves no obligation beyond reciprocal help. But planting, husbandry and harvesting were traditionally done by the household and were thus closely associated with rights to the crop. A's enterprise began as a joint venture with his brothers, though the initiative was provided by A. It was not until after World War II that he encouraged and assisted each of his brothers to plant their own individual coffee gardens. A's gardens were then to be for himself and his sons jointly.

C visits every few days and counts cash, takes stock and places orders for supplies. D. manages his own store.

Illiterate store owners are entirely at the mercy of their managers and it is for this reason that A and B have preferred to entrust the work to their sons, though this policy has not always been successful. As a result of management problems in A's store, management was transferred, with apparent success, to another son, but as B has only one son he feels he has no alternative but to persevere with him. C, being literate, can provide a sufficient check on his illiterate manager at least partly because the latter assumes that literacy gives the owner greater knowledge than it does. C formerly had a literate manager who falsified the records, but says the illiterate man has proved completely reliable since he began five years ago.

All the stores have been closed from time to time owing to inadequacy of money to buy stocks. This has been due to the too liberal granting of credit,[1] personal use of store stock by the owner or manager, and the use of gross store income for other purposes.

All the entrepreneurs feel that trade stores provide more money for less effort than cash-cropping. For all except C this has not been the case in practice. In fact, it is likely that A and B have made little or no net profit on their total trading operations since their inception. They are aware of this, but feel that it has been due to difficulties which they now understand and which are therefore less likely to occur in future. For three of the four this is probably true, but all except C appear to expect higher future income from trading than is likely to eventuate. The stores are very small, turnover for the year 1965 averaging $956.[2] They buy their goods at a discount (inappropriately called 'wholesale') from European and Chinese retailers in Popondetta. Their turnover is too small and their knowledge of commerce too limited to enable them to buy wholesale from outside the district. Mark-up on goods has varied from nothing to 30 per cent and for a long time one of them was retailing at the nearest 10 cents above

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[1] Although they say they have a policy of not giving credit, all four have lost money from giving credit in the past. Three of the four find social pressures such that they continue to grant limited credit to close friends and close kin. In December 1965, A had about $60 unpaid credit outstanding, some of it of several months' duration; and two others had smaller amounts outstanding.

[2] Store turnover for the year for the four entrepreneurs was estimated from available records at $912, $500, $1,992 and $420 respectively.

informal 'company' was formed to operate the enterprise. There were sixteen shareholders, all residents of A's hamlet or the absent sons of residents. A contributed $144 in cash while the others contributed $10 each. This money is used as working capital and placed in a Cocoa Account at the savings bank. It is controlled by A's eldest son, who is referred to as chairman of the company and is generally responsible for the handling and marketing of produce.

Wet cocoa beans were bought from villagers from moneys in the Cocoa Account at 3 cents per pound and fermented and dried. They were shipped through a local trading firm and sold on the London market. The fermentary has not been very successful because most villagers outside A's hamlet sold to a European fermentary which collected the beans and paid a higher price. Another, and perhaps more important, reason that the local fermentary was not patronised lay in tensions and divided loyalties within the neighbouring villages. From early 1962 until May 1963 only 7,080 pounds of wet cocoa beans were processed using the temporary fermentary. No later figures are available but the credit balance in the Cocoa Account rose from $174.07 in June 1963 to $470 in January 1966.

All four entrepreneurs aspire to owning a motor vehicle. A's early attempts were declined by officials,[1] and his attempt to establish a bus service in 1963 (for which he had sufficient finance) was thwarted when the only licence was granted to an expatriate. He still gives top priority to buying a vehicle for his own cartage and for hire. B had the funds but not the driving skill.

The difficulty of acquiring a skill such as driving is often overlooked. For a person in a rural area it is usually necessary to go to a town and get a job. Even then one may spend several years in an unskilled job without getting the opportunity to learn to drive. Few Papuans have vehicles and most people are naturally reluctant to allow others to practise on their vehicles. B's son has now tried unsuccessfully for three years to find an opportunity to learn to drive. C and D have each been seeking a cheap second-hand vehicle for some time, but the likelihood of establishing a successful carrying business is doubtful, for overheads are high, business would probably be irregular and many of the potential customers would have difficulty in paying. In the long term, as incomes rise, there will certainly be openings for such ventures. In the meantime, however, there is a danger that a transport business would survive only if it was subsidised in part at least from

[1] Official approval was then necessary for indigenous people to go into debt.

income derived from cash-cropping and trading. Prestige may be an even more important motivation to the acquisition of vehicles than it is with trade stores.

Other property

As shown in Table 3 the entrepreneurs have tools to the average replacement value of $30 and equipment associated with their cash-cropping to an average replacement value of $180 - an average of $210 per man. By comparison Orokaiva people of Inonda village had only about $13 and Sivepe village about $18 worth of tools and equipment per household.[1]

The entrepreneurs all had a range of consumers durable goods far beyond that found in villages. A and B owned bicycles worth about $50 each, A and D each had a radio which cost $60 and $47 respectively, and A and D also each owned wood-burning stoves costing about $70 each. The wife of C had a sewing machine which cost $70 (not listed in the table of tools and equipment as it is used only for domestic purposes). All had kerosene lamps and three of the four had clocks or watches. The average replacement value of the above items was in the region of $125 per man. It is estimated that possessions of this kind in Orokaiva villages in which we worked would average about $10 per householder.

The houses of the entrepreneurs are all somewhat larger than the average village house, and for many years B maintained two homes - one in his coffee garden and one in the cocos garden. D's home is much more elaborate than the others and contains crockery, cutlery and kitchen utensils worth over $50 as well as beds, chairs, tables and curtains which are almost never found among villagers. A has a modern cocos fermentary worth $500, B has a coffee drying store and trays, estimated worth $80, and C a copra drier worth about $100.

By comparison with other Orokaiva people the entrepreneurs have few livestock, at least partly because they damage the root systems of the coffee and cocos trees. A, B and C had none at all and D kept thirteen fowls from which he hopes to breed for commercial egg and poultry production. Householders at Inonda and Sivepe, by contrast, kept an average of two pigs and two to three fowls each.

At the request of the entrepreneurs, details of their individual holdings of cash are not included in this paper and can only be made available to researchers or to others with the permission of the entrepreneurs. All four have savings accounts, the average

[TEXT CONTINUED ON PAGE 16]

[1] Crocombe and Hogbin 1963b:44-5, Rimoldi 1966:25. Other comparisons in this section are drawn from the same sources.

Table 3

Replacement value of tools and equipment owned by entrepreneurs*

	A		B		C		D	
	No.	Value $	No.	Value $	No.	Value $	No.	Value $
Tools								
Axes	2	3.35	2	3.90	3	5.85	2	5.00
Bush knives	5	7.25	3	4.35	5	7.40	2	2.40
Grass knives	5	1.25	4	1.00	3	0.75	-	-
Picks	1	2.90	1	2.90	-	-	-	-
Shovels	1	3.20	1	2.40	1	2.40	-	-
Spades	-	-	3	6.15	1	2.05	2	2.40
Forks	-	-	1	2.92	1	1.70	-	-
Rakes	-	-	-	-	-	-	1	0.85
Hoes	-	-	1	1.25	-	-	-	-
Adze	1	2.35	1	2.35	-	-	1	1.50
Saws	2	7.45	-	-	1	2.40	1	4.50
Hammers	1	1.65	1	1.65	1	0.80	2	2.05
Pinch bars	1	1.50	-	-	-	-	-	-
Planes	-	-	-	-	-	-	2	8.75
Levels	-	-	-	-	-	-	3	7.20
Shears	-	-	-	-	-	-	1	0.85
Rulers	-	-	-	-	-	-	1	0.80
Total tools		30.90		28.87		23.35		36.30
Equipment								
Shotguns	1	56.00	1	56.00	1	56.00	1	43.00
Coffee hullers	1	28.00	2	50.00	-	-	-	-
Coffee pulpers	1	64.00	1	58.00	-	-	-	-
Coffee grinders	1	4.15	-	-	-	-	-	-
Pulping troughs	-	-	3	6.00	-	-	-	-
Rice hullers	1	31.00	-	-	-	-	-	-
Knapsack sprays	1	26.50	-	-	-	-	-	-
Counter scales	1	3.50	1	6.00	-	-	1	3.00
Produce scales	1	8.50	1	12.00	-	-	-	-
Water hoses	-	-	1	4.72	-	-	-	-
Buckets	-	-	-	-	-	-	2	3.70
Iron	-	-	-	-	-	-	1	9.00
Sewing machine	-	-	-	-	-	-	1	192.00
Total equipment		221.65		192.72		56.00		250.70
Total tools and equipment		252.55		221.59		79.35		287.00

* These were retail replacement values in Popondetta stores at the time the inventories were made.

474 177 241 share to the owner of the land. This activity started some time after 1947 and ceased with the eruption of Mount Lamington. It involved "everybody" at Pamba. At Inonda, both rice and peanuts were tried out. The rice was planted in one block, without subdivisions; it was hulled and sold at Higaturu government station, the money was distributed. There were two harvests between the time people started to grow rice and the time of the eruption, when rice was abandoned. Proceeds were 18 pounds and nine pounds; people's shares were two to three pounds each. The mission had nothing to do with the activity, but only the government, so I was told.

The evidence, limited as it is, leads one to wonder whether the rice produced by the cooperatives was really unsaleable, as Dakeyne suggests (1966: 61-62). On the other hand, there is no doubt that the mission lacked any marketing facilities and I would strongly agree with Dakeyne that the cooperative movement could never have succeeded except on the basis of cash sales for good prices. Sivepe, acting under mission influence, ate their own rice and did not attempt to sell it. When the people came back after the eruption, the rice was "spoiled," the deacon had been transferred to another station. In Inonda, the crop had likewise been "spoiled." Dakeyne reports that in 1951, the rice was attacked by a species of "army worm;" the District Agricultural Officer ordered all crops destroyed.

474 241 [427] The pattern of production of the Sivepe rice resembles that of the communal yam gardens. There also, several men may plant together in the garden of one of them; the users are then expected to make a gift of yams to the owner before taking away their own. If we put this strictly in contractual terms, a man leases land to others for one year for a fee. The lessees, together with the owner (who retains one section for himself), club together as a kind of working bee for the planting and harvesting (and perhaps some other operations). This traditional pattern was revived after the eruption in the establishment of coffee and rubber stands. Its significance, however, is somewhat changed if such common cultivations are carried on not for the sake of growing food for feasts (such as the yams), but for cash (as in the case of rubber and coffee and perhaps rice). When a common plot is established for cash crops (but not yams), the Sasembata district people call this a "company;" they speak of "company land"--the word "company" being a borrowed English word incorporated in Orokaiva vocabulary. This word has mildly millennial overtones: a "company" is the means by which the Orokaiva may acquire wealth equal to that of the Europeans. It would be unfair to say, with Kleekham, that the [829] "company" of the Orokaiva is a mystical and magical device; it is in fact a representation of what Orokaiva believe European business to be like.

● 471 [516] Today, Sivepe has three forms of economic organisation. The dominant one is that where the factors of production are entirely provided by the extended family and where the product is appropriated by the extended family also. This sytem applies to subsistence as

471 well as cash crops. The clan or village has overriding rights to the product only when a feast is being held; at such a time, people are encouraged to make extra plantings and are expected to donate what has been grown in excess to their own requirements. Such donations are represented as "voluntary" by informants.

471 241 621 The second type of organisation is that brought about by the Australian government's insistence on the planting of village quota's of rubber and coconut. Here, as I explained, an undivided area was planted by "all" members of the community, and the product appropriated by individuals on a sort of roster system. The land remains owned by the individual who made it available and it will revert to him when the trees die off. It is only the trees that are "communally" owned. There is no traditional precedent for this kind of arrangement.

471 241 427 The third type is that described on the preceding page. For this system, the selected plot of land is divided into sections called tane. This is common procedure also when subsistence crops are planted. Each tane is then lent to a person who will plant coffee or rubber there. This lending of tane is likewise traditional; a man described how his sister, after a quarrel, came back to Sivepa (she had married out) and he at once gave her a tane from his new garden to look after. The only difference, in the case of tree crops, is that the tane is lent out for a longer period, in fact as long as the borrower continues to harvest the trees (regularly). No new "communal" coffee plots of this sort have been established in Sivepa for many years; there was, however, such a plot allocated to rubber around 1964, as I have described. It was called a "company" and the agricultural officer told me that the government did not like supporting these "companies," preferring development of "individual holdings."

474 245 In the neighbouring village of Sasembata, where a rubber cooperative was set up, a new variant developed in 1967. This was also called a "company;" its main asset was a small factory for processing the rubber. The "company" was also allocated a plot of land, owned by a village man, where trees were planted by a work group, with the intention of tapping and selling the rubber for the benefit of the company--there was some talk of saving up for a truck to cart the rubber and other village products. In addition, villagers planted trees on their individual land and rubber harvested from that land would be processed at the factory and proceeds would go to the grower. This scheme met with some sturdy opposition from the agricultural officer. The fear of the administration was always: cargo cults, communism, fraudulent accounting. Four Sivepa men were actively occupied for some weeks on helping to build the rubber factory. They also contributed $10 membership fee. Members were drawn from all villages closely related to Sasembata.

474 443 Cooperative principles were also not infrequently followed in the setting up of trade stores. Rimoldi (1963) reported one such venture, involving 11 villages and centred on the Sasembata mission station. The savings seem to have totalled $60 from each of 12 clans,

his powers of black magic would be undermined by the church if he joined it. It seems likely that it was in part his influence which made Seho less inclined than Jegase to make outside contacts.

One of his sons, however, did leave the village to join the A.P.C., returning at the time of the eruption. It was this son (the second in seniority) who was chosen by Isemba as his successor to the leadership, as he had fallen out with the oldest one.

This son, baptised under the name of Lawrence in 1963, is now about 50 years of age, proud and withdrawn, and is both the feast-leader and the "committee" of Sivepe. His land holdings are relatively extensive; he has lent some of them on a year-to-year basis to mission personnel. He refuses to sell any of this land to the mission nor will he lend gardens to the mission as organisation. He may help an individual teacher; when that teacher leaves, the land reverts to him. At one time a teacher left just before the taro was ready for harvest; Lawrence took the land and the taro; if the successor of the departed teacher felt upset, he regarded this as a problem for the mission. For Lawrence, this was a grave political issue: if one such land transfer was agreed to, he felt this would effectively mean permanent occupation by the mission of all areas loaned by him.

In spite of appearances, this implied no anti-mission attitude. Lawrence was most interested in the benefits the mission could bring and supported the move of Sivepe to a location on Seho land, six chains from the mission, partly because he liked to be close. But he pursued a careful policy of balance of power. The same pragmatic approach marked his relations with government. He was among the first to acquire coffee trees and Malayan rubber trees; he was, as I have already said, a staunch advocate of the government's village improvement policies, but when the patrol officer called his one concern, as "committee" was to see him happily and speedily on his way again, preferably without incident.

During the year, the women's club wanted some land for their club house. He was on friendly terms with the secretary, who was his elder sister's grandchild and offered an ideal elevated site, between village and mission station which would have made the village entrance most impressive. He was a man who thought of things like that.

Lawrence has nine children, three married and three single daughters and three young sons. One of the daughters, rather against his will, married the most acculturated of the younger Jegase men; if such a thing as factionism existed at all in Sivepe, he and this younger man were clearly cast in the roles of opposing leaders. The second daughter married into Kongohambo, a mile from Sivepe. The third married a Samara man employed at Ilimo, but this man was said to maltreat his wife. Lawrence went to Ilimo and brought her home; this was regarded as quite proper even though bridewealth had been paid.

Lawrence was comparatively well off, largely because he was a good coffee producer, but also because he received bridewealth from three daughters, continuing gifts from his sons in law and from the

177 husbands of his sisters' daughters, as is customary. Most of all, he
623 was a careful man who put whatever he accumulated to the most prudent
● 471 use. In his capacity of clan leader and village leader, he controlled
two corporate savings accounts, one of $158, the other smaller and
secret; people had full confidence that deposits were entirely safe
in his care. Though he would never express himself in such terms, he
was actually leading his people into a state of solid and (hopefully)
economically viable peasantry.

I asked him what he thought were the qualifications of a leader.
177 A leader, he said, must be very smart and understanding, have a lot
623 of garden and make a feast; then the people will join him. They don't
appoint him but he stands out by his farming, gardening, feasts. He
[157] is usually an elderly man.

Not only Lawrence, but also all other informants insisted that leadership was not hereditary, even though a leader may desire a certain son to succeed him. After the old leader is dead, the living are free to make their own decision. Lawrence rejected the idea that the councillors are the present leaders of the community. The ancestors, he said, decided what people ought to do. They had talked all this over. Then the "two-bob councillors" came; all they care about is to carry out the government's orders. They don't really direct the people. All the same, Lawrence was well aware of the influence of the councillors. It was when they were established, he said, that the old way of thinking was upset. The village constable did not make important changes, though sometimes people went to jail for some trouble. In spite of these views, Lawrence went to no particular trouble to keep old customs alive; when he entertained Togahou village, there were far fewer ceremonial features than I saw at a feast at Inonda.

As an informant I found him entertaining but of limited useful-
115 ness. He was at first very reluctant, and later allowed himself to be interviewed, using the occasion as a battle of wits. Never once did he tell a direct lie, but his answers were cunningly planned with the intent to mislead. My part of the game was to get at the truth and in this game he was a most ingenious opponent. Sometimes he tried to conceal what seemed to me a most innocuous piece of information; thus, he alerted me to institutions I might otherwise have overlooked. No statement he made could be accepted on its face value. In this he differed from other informants less in intent than in ingenuity.

The other key personalities at the time of my visit were all
123 Jegase. As I had been apportioned to my clan, they were much more
159 helpful with information. They adopted me as a sort of fictional clansman whereas to Lawrence I must have been a fictional affine. My closest associate in the village was actually the son-in-law Lawrence
[559] disliked, Robert, my neighbour. He was a man of about 32 who had most of the qualities admired by the Orokaiva: a fine dancer, with charm, modest bearing, wisdom and foresight in handling social situations and conflicts; he was generous with his possessions and did not importune others for gifts; he was a good gardener, builder and worker, ready